



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,598	07/01/2002	Shogo Kakiuchi	818330036	3037

26021 7590 02/18/2004

HOGAN & HARTSON L.L.P.  
500 S. GRAND AVENUE  
SUITE 1900  
LOS ANGELES, CA 90071-2611

EXAMINER
----------

CRAWFORD, GENE O

ART UNIT	PAPER NUMBER
----------	--------------

3651

DATE MAILED: 02/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/089,598

Applicant(s)

KAKIUCHI ET AL.

Examiner

Gene O. Crawford

Art Unit

3651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 6-18 and 20-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6, 16 and 25-35 is/are allowed.
- 6) ☒ Claim(s) 7-15, 17-24, 36-38, 41-43 and 46 is/are rejected.
- 7) ☒ Claim(s) 39, 40, 44 and 45 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/12/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 12, 2004 has been entered.

### ***Allowable Subject Matter***

2. Claims 6, 16 and 25-35 are allowed.
3. Claims 39, 40, 44 and 45 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. The following is a statement of reasons for the indication of allowable subject matter: : the conveying apparatus having a rotary disc portion with two plates and a gap therebetween including the unique features of 'the supporting members having an adhesive property' in combination with the rest of the claim language is not taught or fairly suggested by the prior art.
5. The following is an examiner's statement of reasons for allowance: the conveying apparatus having a rotary disc portion with two plates and a gap therebetween including the unique features of (i) 'an air shutting device positioned

Art Unit: 3651

between the pair of parallel plate members, the air shutting device having a solid portion for preventing air suctioning'; and (ii) 'a thickness gate having a projection portion protruding toward the conveyed article to allow the article to be in a high attitude on the step portion' in combination with the rest of the claim language is not taught or fairly suggested by the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. The indicated allowability of claims 7-10, 20 and 21 is withdrawn in view of the newly discovered reference to JP 60-72418. Rejections based on the newly cited reference follow.

### ***Claim Rejections - 35 USC § 103***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 7-15, 17-24, 36-38, 41-43 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaziura et al. in view of Ackley Sr., et al. and JP 60-72418.

The conveying apparatus and method thereof disclosed by Kaziura et al. includes: **(claims 7, 20, 36)** a rotary disc portion having a pair of parallel plates 1, 2 with a region defined therebetween, a gap<sup>3</sup> formed on the region between plates 1, 2, a first suctioning device 10, a linear conveying portion having a pair of parallel conveying belts

Art Unit: 3651

with a gap formed there between (figure 7); **(claim 11)** a second suctioning device provided between the parallel conveying belts 29; **(claims 12, 22)** a side surface inspection portion  $T_{1-3}$ ; **(claim 13)** the linear portion including a first conveying portion 41 and a second conveying portion, one end of the second conveying portion being in communication with the other end of the first conveying portion as to further transfer the article; **(claims 14, 15, 23)** further comprising an aligning and supplying apparatus 14 including a turntable and a width guide 23 for supplying the outer peripheral surfaces of the pair of parallel support members, the aligning and supplying apparatus positioned opposite the first conveying portion; and **(claim 17, 18, 24)** a front surface inspection portion  $T_{1-3}$ , a back surface inspection portion  $T_{4-6}$  and a sorting portion 42 wherein the articles are sorted in response to results obtained by the inspection portions.

Kaziura et al. discloses both rotary transfer devices and linear transfer devices each having suction means for feeding articles for one point to another in an inspection and sorting operation, but does not disclose the rotary transfer device in combination with the linear conveying portion. It appears inherently obvious from the teachings of Kaziura et al. that one so skilled in the art could use the rotary transfer device  $X_1$  in place of conveyor 41 to feed articles from turntable 14' to the linear conveying portion A disclosed in figure 7. Furthermore, this appears to be a mere rearrangement of the parts disclosed in Kaziura et al. and would have been obvious design choice and expedient in view Ackley Sr. et al. The conveying apparatus of Ackley Sr., et al. includes the broad teaching of providing a rotary suction carrier as a transfer/conveying device in communication with a linear conveying portion (figure 1). It would have been

Art Unit: 3651

obvious to one of ordinary skill in the art to provide the rotary suction device and method thereof disclosed by Kaziura et al. be in communication with the linear conveying portion to facilitate transfer of articles from one conveying portion to another separate conveying portion opposite the rotary suction device as taught by Ackley Sr., et al.

Kaziura et al. discloses all the claimed features but does not disclose supporting members positioned in grooves of the pair of parallel plate members to hold the article in place. However, JP 60-72418 discloses the broad teaching of providing a conveying apparatus having a pair of parallel plates, with a gap formed therein where air is suctioned through the gap to hold articles about a periphery of the plates, that include supporting members 2, having O-rings 16, that fit in and around the grooves (between ref nos. 23, 24) formed on the periphery of plates 5, the members being made of rubber and having a large coefficient of friction. It would have been obvious to one of ordinary skill in the art to provide the rotary suction device and method thereof disclosed by Kaziura et al. in view of Ackley Sr., et al. have supporting members positioned in grooves about the periphery of the opposed plates to allow for an alignment buffer between the plates and the articles transferred as taught by JP 60-72418.

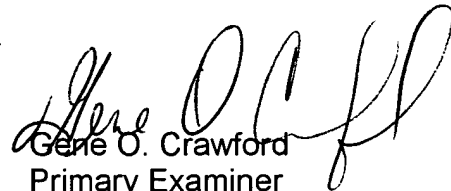
### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gene O. Crawford whose telephone number is 703/305-9733. The examiner can normally be reached on Monday thru Thursday.

Art Unit: 3651

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Ellis can be reached on 703/308-1113. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Gene O. Crawford  
Primary Examiner  
Art Unit 3651

\*\*\*